BEST of the WEB

Two of Maine's official Web sites have been singled out by the Center for Digital Government in their 2003 Best of the Web national competition for eGovernment excellence. The state's official portal (*www.Maine.gov*) was ranked second among a field of more than 260 public sector Web sites, and the on-line government services offered by Secretary of State Dan Gwadosky (*www.Maine.gov/sos*) were also recognized in the constitutional officer category.

"Maine continues to find new ways to use the Internet to help our citizens and businesses save time, and our commitment to excellence is again reflected in this year's Best of the Web rankings," said Governor John E. Baldacci. "The services offered by Maine.gov and the Secretary of State continue to raise the bar for all states, and I'm very proud of Maine's accomplishments."

Department of Agriculture Brings Dog Licensing On–line

BY NORMA WORLEY & TIFFANY GLIDDEN

The Department of Agriculture, in partnership with InforME, is pleased to introduce a service, On-line Dog Licensing. The system permits citizens to license their dogs on the web, 24 hours a day, 7 days a week. Users also have the option to make a contribution to fight animal abuse in the State of Maine. The system is designed to protect individual privacy. All payment information is transmitted over secure lines and no confidential information is stored by the system. The system uses "secure socket layer software" to encrypt personal and financial information such as credit card number, or name, and address during transmission to the server.

ONLINE DOG LICENSING — Application to renew your dog license.

Currently, in order for a citizen to license a dog they need to go to their municipal office with a current rabies certificate, spay or neuter certificate (if the dog is altered), and cash or a check. Many citizens often overlook licensing their dogs, or find it inconvenient to appear in person during limited municipal office hours. The 130,000 dogs licensed in the state is only 50-60% of the total canine population. The Department of Agriculture hopes that by offering the convenience of licensing dogs via the Internet that more dogs will be licensed in the state, while shortening lines and lightening workloads at municipal offices.

Municipal participation in the On-line Dog Licensing program is optional, and participating municipalities receive their full licensing fees. Citizens will need to have the same information that they would in order to license their dog at their municipality but they will be able to pay with their credit card. They will be able to license multiple dogs in one transaction with this service.

A Public/Private Collaboration Promoting Maine Businesses

BY PHILIP HELGERSON

In 2001, the State of Maine appropriated 6.4 million dollars to establish the Applied Technology Development Center program, offering establishment grants of between $400,000 and $950,000 for infrastructure development.

The seven Applied Technology Development Centers (ATDC) operate as independent non-profit organizations, but are unified to leverage resources and enhance opportunities for their clients[1]. The Centers are the "go-to" source of information, training, and resources where client firms get connected with Maine's strong array of business support services, and networked with appropriate private sector resources.

In the recently approved economic development "Jobs Bond", four centers received a total of $2 million in additional funding to complete essential infrastructure work. The Department of Economic and Community Development (DECD) also administers an annual grant program that offers modest financial support for center management and administration.

Collaboration Promoting Maine Businesses, cont.

The ATDC system (*http://www.atdcmaine.org/*) is coordinated by DECD, with the assistance of an advisory board that includes representatives from several Maine government offices, (e.g. University of Maine System, the Maine Community College System, MTI, and Maine MEP), and private sector representation from banking, legal, and entrepreneurial sectors. Appointed representatives currently fill these private sector positions from Bernstein Shur Sawyer and Nelson, Bangor Savings Institution, and Alden Rowing Shells.

In this second year of operation, the ATDC program is helping more than 20 residential tenant firms, and over 50 affiliate firms. Firms stay as clients for about three to five years, and then move on to appropriate facilities in the region. Three companies have graduated from ATDC programs so far.

Each center has a primary focus in one of the seven targeted technology sectors strategically identified for development in Maine's economic development plan.

Partnerships In addition each center has local and regional partnerships with colleges/university

Dog Licensing On–line, cont.

It costs citizens $7.00 to license an altered dog and $11.00 for an unaltered dog. The dog licensing application will debut in November and can be found at *www.onlinedoglicensing.com*.

Tiffany L. Glidden is an eGovernment Specialist at InforME (the Information Resource of Maine http://www.state.me.us/informe/). She may be reached by calling 621-2600 ext. 31 or e-mailing tiffany@informe.org.

Norma Worley of Brewer was named Chief of the Animal Welfare Program of the Maine Department of Agriculture in February 2003. Previously she was a supervising animal control officer in Ventura County, California, for 21 years. Contact her by e-mailing norma.j.worley @maine.gov.

Maine's Applied Technology Development Centers

Focus Area	Center Name	Location
Environmental Technology	Center for Environmental Enterprise	South Portland
Forestry and Agriculture Technologies	Loring Applied Technology Center	Limestone
Biotechnology, Information Technology	Thomas M. Teague Biotechnology Center	Fairfield
Aquaculture and Marine Sciences	Maine Aquaculture Incubators	Walpole, Franklin, and Eastport
Composite and Advanced Materials	Composite Materials Technology Center	Sanford and Greenville
Precision Manufacturing and Electronics	River Valley Technology Center	Rumford
Information Technology	Target Technology Center	Orono

branches, technology and business associations, and business and professional partners. College and university links provide opportunities for student internships, work-study programs, and faculty support for technical and research support. In addition, all the centers benefit from a statewide partnership with the *Maine Technology Institute*, which provides early stage financing as grants and other awards for technology firms.

All centers are also partnered with the *Maine International Trade Center*, offering insights into global markets. Through these partnerships, all ATDC client firms have access to professional marketing survey, and other international commerce advice. Through this partnership, two ATDC firms and one ATDC director were assisted in participating in the recent trade mission to Ireland and Northern Ireland.

All ATDC directors are trained as associated counselors in *Maine's Small Business Development Center* (SBDC) program. This center offers direct business counseling services and connections to other SBDC counseling and business support information, training, and referral resources. Maine's *Manufacturing Extension Partnership* also offers support services by linking ATDC firms with technical assistance in product development, production design, and manufacturing, and other federal resources.

ATDCs are also served by the *Maine Procurement Assistance Center* and its Market Development Center. It provides information about federal procurement opportunities, such as the important Small Business Innovative Research Program, sources of early stage funding, and technical assistance. Additionally, all ATDC's and their client firms are also provided full membership status in the *Maine State Chamber of Commerce*, gaining access to business information and services through that private sector business association.

Maine's Jobs Council and local *Workforce Investment Boards*, through their Career Centers and Training Resource Centers also have a strong partnership with the ATDCs connecting new firms with skill development resources.

Stay tuned for an upcoming article on Intelligent Spatial Technologies – a new Maine information technology company, located at the Target Technology Center in Orono.

Questions? Contact the author by e-mailing philip.helgerson@maine.gov.

[1] Clients may include residential tenants that operate from offices and manufacturing or laboratory space in the centers themselves, and "affiliate" clients that take part in programs without being facility occupants.

Nexus Management Evaluating Data Center

By Mark Kemmerle

In October, the Bureau of Information Services (BIS) contracted with Nexus Management of Brunswick, ME to evaluate the current BIS data center's physical layout with the intention of improving air flow, cooling, and electrical capacity.

Background When BIS moved to its current site in January, 1999, approximately twenty servers were moved from the old State Office Building location. Since then, over 200 additional servers have been installed, including the Department of Human Services' (DHS) servers from their old Western Avenue location, and major new installations for DHS's Automated Claims Eligibility system (ACES) and the Department of Educations MEDMS project (No Child Left Behind). These new servers have caused dramatic changes in the computer room. Long, straight aisles have disappeared. Old hardware has been relocated and repositioned, and new hardware placed in formerly empty spaces. Recently, BIS has become concerned that the existing cooling, humidification and electrical power distribution systems in the data center may not be adequate to continue to support growth at the current rate.

Sometime before the end of 2004, the BULL mainframe will finally exit the data center. The State has run applications on BULL hardware for over thirty years, but when the Motor Vehicle Registration system, the DHS financial systems, and the Inland Fisheries and Wildlife applications are migrated to new platforms, the BULL will be retired. When the BULL mainframe and the BULL tape libraries are removed from the computer room floor, about a third of the data center floor space will be reclaimed, and will become available to house additional servers.

To insure that BIS can provide an ideal climate for state government's computing hardware, BIS Production Services has commissioned a study of the data center's floor space design and utilization, heating and ventilation systems, fire protection and other alert systems. The Environmental Configuration and Capacity Study will identify and define in detail the current environmental systems utilization and floor plan layout. The study will include an evaluation of the overall building design, current floor plan, and hardware and rack design.

It is understood that the hardware currently located in the data center will change over time. Nexus will not recommend that existing systems be replaced or modified, but it may recommend changes to the floor plan or configuring systems differently within their existing rack systems. Nexus will also review and evaluate the electrical, HVAC (Heating, Ventilation, Air Conditioning), and fire suppression systems against industry standards and currently available technology, so that BIS can plan maintenance and migration for computer room infrastructure.

BIS expects to learn about the current state of its computer room infrastructure and about what changes need to be made to make it suitable to support continued growth. Nexus will identify industry "best practices" that will allow BIS to plan for the future to offer a safe, secure, and economical environment to house critical computer applications.

Questions? Comments? Contact author Mark Kemmerle, Director of BIS' Production Services by e-mailing mark.kemmerle@maine.gov.
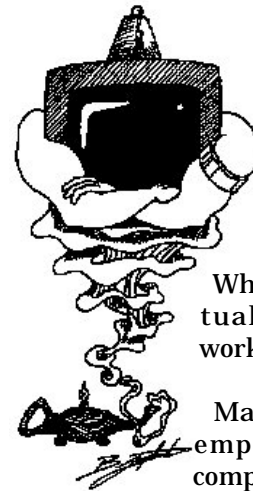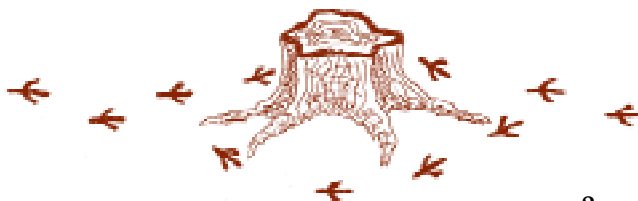
PC Genie

What is a VPN (Virtual Private Network)? How is it used?

Many State of Maine employees require computer access from locations outside the State's WAN (Wide Area Network). These may include field workers (wildlife biologists or highway engineers), employees conducting state business from an out of state location, or those who need access to the State's computer resources from their home. Many have asked the Customer Support Center what WAN access methods are available to them and more importantly, which method best fits their needs.

The State offers two options for its employees to remotely access their on-line files: VPN (Virtual Private Network) and IPRS (Internet Protocol Routing Services). Both products enable users to access state computer data and resources which are secured by the State's firewall[1]. The difference lies in who provides this service.

With IPRS, the Bureau of Information Services acts as the ISP (Internet Service Provider). IPRS offers a direct connection to the State's Wide Area Network, allowing users to tap into computer resources through a dial up networking connection using a phone line. Alternatively, VPN is for those who already have a contracted ISP (for example America On-line) for use on their privately owned PC's. VPN allows a high speed connection to the State's WAN, which is only limited by the type of connection that your ISP provides. If the ISP only offers a "dial up" connection, users are faced with the same speed limitations (usually 56K) that IPRS offers. Usually, ISPs offer high speed cable connections which are much faster to connect, and present data.

Work Smarter Using the Power of the Desktop . . .

BY CHERYL RING

…is the motto of the Computer Training Lab in room 104 of the Cross Office Building!

In the first year, participants in the Lab's courses have affirmed that we're on the right track, routinely reporting that they are pleased to get more work and productivity out of their computers.

For example:

"Excellent course – enjoyed the entire day!"
"All these courses are great and needed by all State staff!"
"Pace was excellent"
"Excellent instructor who adjusted her teaching to make sure all the students learned despite varying levels of knowledge"
"… very worthwhile"

Courses The Lab offers classes in the use of the Microsoft Office Suite, including MS Word, Outlook, Excel, Access, PowerPoint, and Publisher. Courses on Dreamweaver MX, HTML 4.0, and Visual Basic are also available.

In the last quarter, 15 new courses were developed and scheduled to help meet the needs of State employees. The Lab's website now shows courses available in the current quarter (through December 2003). Next quarter's classes (January through March 2004) will be up on the website within the month. Details on all these courses are listed on the Lab's website at *http://www.maine.gov/bhr/statetng/comptng/index.html*. Please check out the range of courses offered in November and December – we'd love to have you participate in any class of your choosing. Course fees to cover the costs of keeping the Lab up and running are also available on the website.

Enrollment The enrollment form on the website may be filled out and faxed, or participants with access to the MFASIS Training Management System may enroll fully on-line.

Leasing and Charters The Lab is available to lease by others for a day-rate of $300, or after-hours @ $125. We are also happy to arrange for special "charters" of the room whereby we deliver a standard course to 12 students, for a fee equivalent to 11 students, in order to assist departments in getting training for whole staffs.

Questions? Contact Cheryl Ring, Computer Training Manager by calling (207) 624-7367 or e-mailing cheryl.e.ring@maine.gov.

PC Genie, cont.

Regardless of the access method (IPRS or VPN), State users cannot access their data unless they are assigned a Securid card. The Securid card has a six digit display that changes its code every sixty seconds. This code, along with the four digit pin number that is assigned to the card is the vehicle into the States' networked computer system.

In order to obtain a Securid card, employees need to contact their agency's IT manager, because each agency is billed monthly for Securid cards. After agency approval, requests for new Securid cards should be made by calling BIS Security Card coordinator, Ron Grimard at 624-8876.

[1] See also two article printed in this publication by Chad Perkins: Firewalls What They Are and Why We Need Them *http://www.state.me.us/newsletter/oct99/internet_firewalls.htm* and An Internet Firewall Update *http://www.state.me.us/newsletter/mar2003/an_internet_firewall_update.htm*.

Challenge

BY LESTER DICKEY

At my favorite fruit stand, an orange costs 18 cents, a pineapple costs 27 cents, and a grape costs 15 cents. How much does a pear cost? For a more difficult challenge, but no chance at a pizza, how much does a plum cost if an orange costs 15 cents, a pineapple costs 20 cents, and a grape costs 10 cents?

Please e-mail **Lester Dickey** with your answer and your name, phone number, and the organization for which you work. Or call **Barbara Buck** at **624-9501**. The winner will be drawn from all the correct entries and will receive a **FREE** donated pizza, either from **CJ's Pizza** or from the **EDOC Cafeteria**. All answers must be in no later than the **14th** of the month.

Last month's challenge brought 47 submissions, with 32 being correct answers. The winner, chosen by random drawing, is **Peter Konieczko** of **MRS.**

The answers to last month's Challenge: 16 pieces of chalk will last 21 days, with 1/4 piece left over. 30 pieces of chalk will last for 39 days, with 3/4 piece left over. For those of you who expressed an interest in getting chalk glue (also used for mending wands), I think it is available at Ollivander's in Daigon Alley.

Managing Antivirus Software Across the Enterprise

BY ROBERT WITHAM

Traditionally, antivirus software installation and deployment has been on a machine-by-machine basis. If I wanted to install my antivirus software on 10 workstations and four servers, I would have to visit 14 machines. This isn't too bad, but when you have 100 or 1,000 or more machines, it can be a bit time consuming to initially install the software. Moreover, you need to visit each machine again if you ever want to change any of the scan settings or if you want to update the software to a new version.

This is where McAfee Software's ePO (Enterprise Policy Orchestrator) product comes into play. ePO allows control and management of antivirus software on thousands of individual machines across an enterprise. If it is necessary to change any scan settings like scanning all files with an extension type of .xyz, a simple change under ePO will distribute that change to all managed machines within minutes. A task that used to be performed manually, and could take days, now only takes a few minutes.

Similarly, when BIS decided to upgrade all SLA (service level agreement) customer machines from version 4.5.1 of McAfee antivirus to the newer version 7.0, one change under ePO caused the change to happen on almost all of the 1,300 SLA computers within 24 hours. The few that were missed were because those computers were not turned on. As soon as those last few computers were powered up again, they had the new software in less than an hour after connecting to the network.

ePO also gives us centralized reporting capabilities. We can see how many machines are protected by antivirus software, if their data files are up to date, and if any viruses have been detected. By knowing how well we are doing, and knowing what percentage of our computers are up to date, we can make an informed risk assessment when new vulnerabilities or new viruses are detected. ePO provides us with an additional tool to help manage the security of our network.

BIS provides ePO to all agencies as part of the basic WAN rate. Agencies who are currently not taking advantage of ePO are not getting everything they are paying for. Even if agencies only use ePO to report on the status of their computers and servers, it is well worth the minimal effort they need to invest in it.

If you would like to use ePO within your agency, contact Bob Witham at BIS through the State Outlook e-mail system.

Security Experts Ready to Help You!

SearchSecurity.com, a leading IT security Web portal, now offers a host of experts ready to take your questions on concerns, issues and problems specific to your business. According to SearchSecurity.com, the experts include some of the leading figures in the security field. "Our experts have been chosen by our editorial team for their knowledge of specific technology areas," say sources with SearchSecurity.com.

Industry professionals are invited to log on and pose a question (as clearly and specifically as possible). Within a week, your answer should appear on the site. While you wait for your response, browse the questions left by other professionals in your field and see their answers. Topic areas include: Web services security; infosec training and certification; infrastructure and network security; platform and system security; security policy and user awareness; viruses, worms and Trojan Horses; and e-mail, e-commerce and encryption.

The site also has an open forum for questions in these areas or any other can be posed. Visit *www.searchsecurity.com* and look for the link "Ask the Experts" to check out this interactive and informative resource.

Knitters Needed

BY BARBARA BUCK

Plans for the annual Head Start Holiday party are getting under way. This year's party will be held at the Augusta Armory on Wednesday, December 10. Santa has been alerted and has put the date on his busy schedule. The tree has been ordered and will be delivered in time to be decorated with lots of mittens for the children. The State Troopers Association will also be joining us to give each child a teddy bear. The cooks at the Blaine House are busy making fancy decorated cookies for the event.
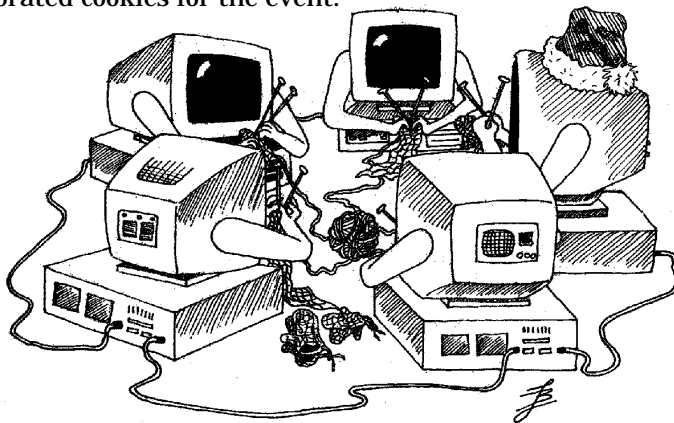
However, as always, before this event can happen we need knitters to help make mittens to fit 3-5 year old children, or if you do not knit and you wish to donate yarn for mittens, we will gladly accept it. Also, we need monetary donations to cover the cost of the gifts for the children. Any yarn, mittens or monetary donations may be sent to Barbara Buck at 145 State House Station or call 624-9501. We can make arrangements to pick up the donations. Please put December 10 on your calendar and join us at the Armory to see for yourselves what happiness and delight you have helped bring to these less fortunate children in our area.

On–line Aircraft Registration Renewal Service Coming Soon

BY KRISTINA PAULHUS & RENEE LORING

Did you know there are approximately 1100 aircraft registered in Maine? As an owner, starting January 1, 2004, you may use the Internet, to renew your municipal aircraft registration in one quick and easy transaction. This new on-line service, may enable you to print your registration certificate on your own printer, (decals will arrive in the mail within 7 to 10 business days), and payment will be made by electronic check.

The Maine Department of Transportation, in partnership with InforME[1], recently announced that it plans to offer Maine aircraft owners a convenient on-line service alternative called, "Aircraft Registration Renewal " from January to June 30, 2004. Accessible at the following website: *www.meaircraftreg.com/*, and via the Maine State Portal at: *www.maine.gov*, this service will be available throughout the 2004 renewal period. A "walk-through" demonstration is available on the website to assist registrants.

This new service, affords Maine aircraft owners the benefits of "eGovernment"[2] service and delivery. By inputting identifying information on-line, an aircraft owner's registration record is quickly retrieved, and a payment screen provided. Electronic check payment is accepted through a system that assures security and privacy of personal information. With instant access and payment, the renewal process is quick and easy.

The on-line Aircraft Registration Renewal service will be available during the regular renewal season, starting in January. Municipal participation in the program is voluntary and there are currently fifteen towns and cities participating. Citizens interested in bringing Aircraft Registration Renewal to their municipalities should contact their local officials.

For more information, contact Kristina.Paulhus@maine.gov , or call 624-3127. Ms. Paulhus has worked at the Maine Department of Transportation's Aircraft Registration Division for two years. When not working, she likes to spend time with friends, and scrapbook. She also cares for two pet rats.

Since September, 1999 Renee Loring, has worked at InforME, facilitating marketing initiatives by promoting new and existing on-line services. In addition to her marketing efforts, Renee manages eGovernment application development, including Business Answers, On-line Aircraft Registration Renewal, and Annual Reports On-line. In her spare time, Renee enjoys attending music events, theatrical productions, traveling, and reading.

[1] InforME is a public entity created by the State of Maine to operate the State's web portal, www.maine.gov. InforME is managed by New England Interactive, Inc., a wholly owned subsidiary of NIC, the world's largest eGovernment solutions provider.

[2] eGovernment is the use of information and communication technologies to improve the activities of public sector organizations.

GIS NEWS

The Natural Resources Conservation Service (NRCS) is partnering with the state of Maine in the acquisition of updated imagery and the development of digital orthoimagery. NRCS contributed $400,000 towards the federal match and transferred the funds to the US Geological Service in September. NRCS uses for the imagery will cover several programs including the National Cooperative Soil Survey program, soils digitizing, GIS use at the Field Service Centers within ArcView and for the Customer Service Toolkit and the National Resources Inventory.

NEW LEGISLATION

This fall, some new Maine laws became effective. For example, unsolicited commercial Internet e-mail - "spam" - must include the designation "ADV" in the subject line showing it's an advertisement, and "ADV ADLT" if it's adult material. The ads must include return e-mail addresses so recipients can write back to block additional unsolicited e-mail from the same source. The sponsor of the bill, Rep. Albion Goodwin, D-Pembroke, said he wants Mainers to be able to report violators on the state's Web site.

Since September Mainers can download a form from the Internet to request free copies of their credit report once a year (*http://www.state.me.us/pfr/press/ccr_creditreport.htm*). Reports are also available by calling 1-800-DEBT-LAW. "This new law is a valuable tool in the fight to reduce identity theft, mixed credit files and erroneous credit denials," say Will Lund, Director the Maine Office of Consumer Credit Regulation.

Ability to Attract and Retain Skilled & Educated Workforce Attracting and retaining skilled and educated employees in rural areas is particularly challenging to the IT sector. Rural areas, lack "thick" local labor markets from which to attract employees. As a result, companies in rural areas must often rely on recruitment of talent from other labor market areas. Experienced IT workers are often reluctant to relocate to rural areas fearing that if their position doesn't pan out they will again have to relocate, as additional local job options may be limited. Attracting talent to rural regions requires the ability to sell the small-town, rural lifestyle. For some professionals this lifestyle is desirable, for others it is not. Institutes of higher education are important resources for creating greater access to a skilled and educated workforce.

Research and Development Research and development, R&D, activity can spur innovation for the development of new products or processes leading to industry growth. Information technology companies are often engaged in research and development to create new products and services to compete in highly competitive national and international markets. Often this R&D is done in-house and built over-time on a project basis. Therefore, worldwide in this industry, a great deal of R&D occurs at the street level within the businesses offering products and services, as opposed to occurring within research institutions. Part of the reason for this is the demand to get new products developed and to market as quickly as possible in a rapidly changing market. Although the IT sector performs much of its R&D "in-house", access to research institutions within the rural regions can provide significant com-

petitive advantage for local firms.

Industry Networks and Trade Associations Areas experiencing industry growth are characterized by strong networking among businesses and professionals to share resources, discuss industry trends and issues, problem solve, and to represent the industry outside the sector to business and government leaders. These functions are typically performed by industry or professional associations. Two such resources for Maine's IT industry are MESDA, Maine's association for the software and information technology industry and The Target Technology Center in Orono. MESDA provides the IT industry with professional networking, training, user groups, technical assistance and access to market databases and Web resources. The Target Technology Center is an IT business incubator that is supported by the State and the University of Maine. In addition to providing office space for start-up companies, the Target Center provides business assistance and training services to IT business throughout the State. In rural areas, routine networking is challenging due to distances between businesses and professionals. Statewide and regional industry support entities are critical for fostering the linkages that spur industry-wide learning and professionalism.

Leadership Organizations Industry sector growth and development is often spurred by leadership organization(s). Examples of how leadership companies can perform this function include the creation of spin-offs, or new companies, which drive investment in new infrastructure that benefits not only the leadership company, but other

companies in the sector, and fostering partnerships with education institutions to increase offerings.

**Market Potential** - **Local and Export Demand** Because of the relatively small number of businesses within rural areas, local demand for IT services is often not strong enough to generate sufficient activity for significant industry growth. Therefore to grow, firms must compete in other geographic areas. IT firms can develop regional and national niches based on experience gained in the local markets. For example, several of the firms interviewed for the Aroostook study have developed expertise in providing IT services to the forestry and agriculture sectors, which have traditionally been important within Aroostook County. This has helped the companies compete for business outside of the US. Partnering with companies outside of the region is also an effective means for increasing market share outside of the region.

By examining a region's capacity and performance for each of the above factors, leaders within rural areas can begin to develop strategies to support further growth and development of the IT sector. Eventually such strategies will lead to increased job opportunities and incomes.

Jim Damicis is an independent consultant from Scarborough, Maine providing research and analysis in the areas of economic and community development and public policy. Jim can be reached at jdamicis@maine.rr.com.

[1] Source: 2001 Maine Occupational Wages, Maine Department of Labor, Division of Labor Market Information Services, March 2003.

[2] Maine Development Foundation, 1995-2001 Survey of Maine Businesses, Maine Development Foundation.
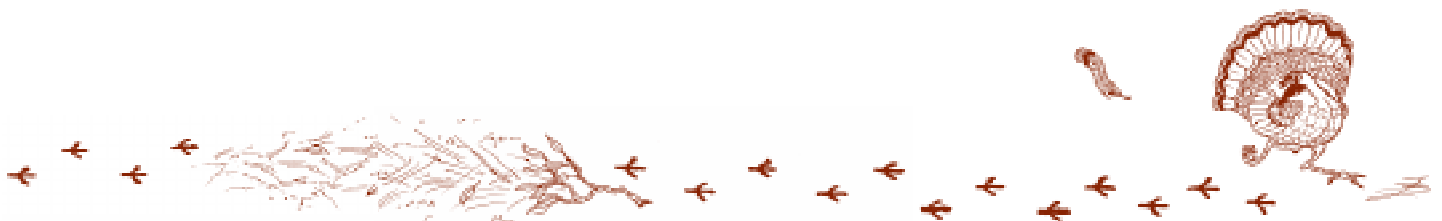
Growing the Information Technology Sector in Rural Areas

By Jim Damicis

*Information technology companies are some of the fastest growing businesses in
Maine and will likely play a leading role in job growth in the years ahead.*

While currently a relatively small sector in Maine, growth in the IT sector is important to economic development. IT-intensive jobs typically pay considerably higher wages than those that are not IT-intensive (see Chart 1[1]). By growing and attracting IT and IT related businesses, rural areas can directly benefit through increased income levels.

Chart 1 - Average Hourly Wages - Maine 2001
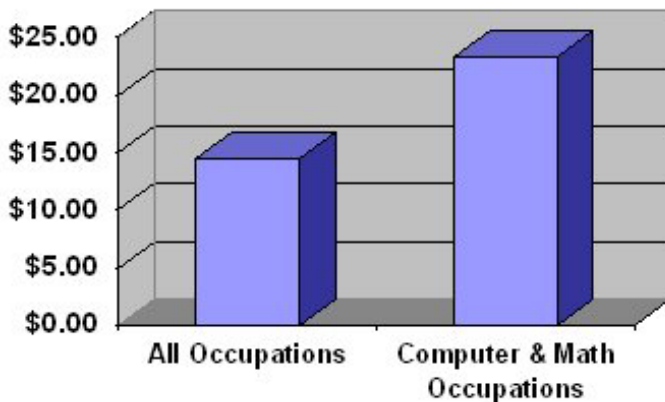
Recently the Northern Maine Development Commission, NMDC, supported a study of the potential for industry cluster development in Aroostook County. Five industry sectors were examined including agriculture, forest products, tourism, precision manufacturing, and information technology. This article presents an overview of factors used to assess the growth potential of the county's IT sector. It is designed to be useful for state and local business and economic development professionals interested in strategies to grow this increasingly important sector in rural areas.

IT Infrastructure Maine business use of the Internet has dramatically increased since 1995, when only 17 percent of Maine businesses reported using the Internet[2] (see Chart 2). By 2001, 86% of businesses used the Internet. However, for today's businesses, simply having Internet connectivity is not enough. Two additional IT infrastructure factors are essential for supporting the IT industry. They are "high-speed" or broadband access and service redundancy. Businesses are increasingly in need of high-speed Internet connections to support core business functions and E-commerce strategies. Additionally, several industries and businesses provide the kinds of products and services which require little to no connectivity "downtime" over the course of the year. For these industries and businesses, it is important that the IT infrastructure connecting rural areas to the rest of the world contain sufficient redundancy, or alternative broadband pathways, should a key digital cable or IT infrastructure component be disrupted. Rural areas typically lag non-rural areas in the deployment of IT infrastructure. The Aroostook study revealed that investments in IT infrastructure has positioned that rural area well for future IT growth.

Chart 2 - Business Use Of the Internet in Maine
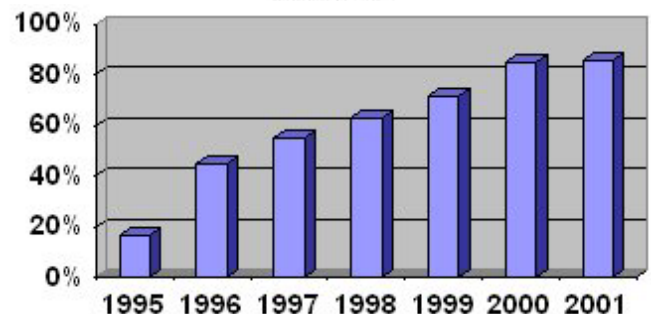
TRANSITIONS

Don Hildebrand, Public Service Coordinator II with the Chief Information Officer's Office, left State government service effective October 10, 2003. Best wishes Don in your future endeavors! Don't forget to keep in touch with us Mainers.

Mark Toulouse, Bureau of Information Services' (BIS) Staff Accountant, working in the Department of Administrative and Financial Services' Division of Financial and Personnel Services' last day was October 10, 2003. Mark has accepted a promotion at the Department of Human Services.

Karen Knox has been promoted to a Programmer Analyst position in BIS' Development Services' RAD group effective October 13, 2003.